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ARCHITECTURE.

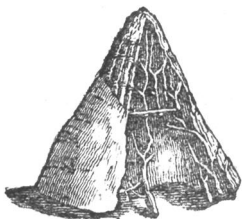
Amongst all the arts which the inventive ingenuity of mankind has at different periods originated, to administer to the wants and weaknesses of human nature, this must surely be ranked in the very highest class: not only does it contribute in the first degree to the blessings and comforts of civilized life; not only does it give a tangible shape, a "local habitation and a name" to the soft endearments of home—but it affords likewise a pregnant subject for the eye of taste to dwell on; and is largely instrumental in exciting that refined and imaginative pleasure which springs from the contemplation of abstract beauty and proportion.

Architecture is divisible into a number of different branches, according to the styles adopted by the various nations practising it, and according to the several eras in which it has been practised. An intelligent French writer on architecture, of the present day, gives us the following enumeration:—Egyptian, Indian, Persian, Phenician, Hebrew, Chinese, Greek, Roman, and Gothic, to which list may be added, the Etruscan, the Moorish or Saracenic, the Saxon, and the English. With regard to epochs, the characteristics arising from these may be ranged under four great heads, namely, ancient architecture, that of the lower empire, that of the middle ages, and modern architecture.

By the means of architecture we are furnished with a test from which may be inferred the comparative cultivation and progress of intellect between man arrived at a high state of civilization and his ruder forefathers; and the opinion of Plato should not be forgotten, that even the study of politics and legislation began with the building of cities. The lofty and stupendous pyramids, obelisks, and temples of Egypt, bear witness to the truth of history and tradition which represent the grandeur and numerical strength of the ancient dwellers on the banks of the Nile. The relics of ancient Athens attest the veracity of those authors who attributed to its population a refined and elegant taste, and an unsurpassable perception of beauty and harmony.

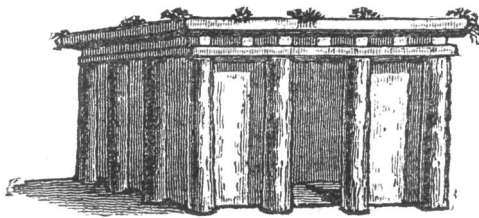
Great caution must be observed in speculating on the state of this art among the nations of antediluvian celebrity. It may, we think, safely be conceded, that they did possess a system of architecture; but it was probably of a very rude and unsophisticated description.

"Anciently," says Vitruvius, "men lived in woods, and inhabited caves; but in time, taking example perhaps from birds, who with great industry build their nests, they made themselves huts. At first they made these huts, very probably, of a conic figure; because that is a figure of the simplest structure; and, like the birds, whom they imitated, composed them of branches of trees, spreading them wide at the bottom, and joining them in a point at the top; covering the whole with reeds, leaves, and clay, to screen them from tempests and rain.—Thus:

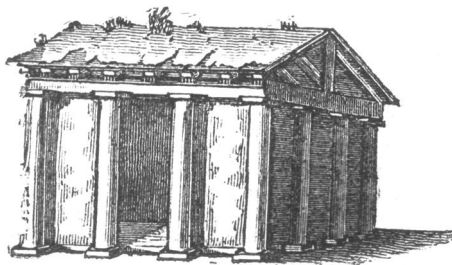


"But finding the conic figure inconvenient on account of its inclined sides, they changed both the form and construction of their huts, giving them a cubical figure, and building them in the following manner: having marked out the space to be occupied by the hut, they fixed in the ground several upright trunks of trees to form the sides, filling the intervals between them with branches closely interwoven and covered with clay. The sides being thus completed, four large beams were placed on the upright trunks; which, being well joined at the angles, kept the sides firm, and likewise served to support the covering or roof of the building, composed of many joists, on which were laid several beds of reed, leaves and clay.—Thus:

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"Insensibly mankind improved in the art of building, and invented methods to make their huts lasting and handsome, as well as convenient. They took off the bark and other unevennesses from the trunks of trees that formed the sides; raised them, probably, above the dirt and humidity, on stones; and covered each of them with a flat stone or slate to keep off the rain. The spaces between the ends of the joists were closed with clay, wax, or some other substance; and the ends of the joists covered with thin boards cut in the manner of triglyphs. The position of the roof was likewise altered; for being, on account of its flatness, unfit to throw off the rains that fell in great abundance during the winter season, they raised it in the middle; giving it the form of a gable roof, by placing rafters on the joists, to support the earth and other materials that composed the covering.—Thus:



"From this simple construction the orders of architecture took their rise. For when buildings of wood were set aside, and men began to erect solid and stately edifices of stone, they imitated the parts which necessity had introduced into the primitive huts; inasmuch that the upright trees, with the stones at each end of them, were the origin of columns, bases, and capitals; and the beams, joists, rafters, and strata of materials that formed the covering, gave birth to architraves, friezes, triglyphs, and cornices, with the corona, the mutules, the modillions, and the dentils.

"The first buildings were in all likelihood rough and uncouth; as the men of those times had neither experience nor tools: but when, by long experience and reasoning upon it, the artists had established certain rules, had invented many instruments, and by great practice had

acquired a facility in executing their ideas, they made quick advances towards perfection, and at length discovered certain manners of building, which succeeding ages have regarded with the highest veneration."

Perhaps the earliest cultivators of architecture, as a fine art, were the Assyrians, whose empire was founded by Nimrod, the builder of the far-famed Nineveh. From Assyria the arts passed into Egypt, one of the most ancient nations in the world, and to which, it is probable, we may fairly attribute the rise of the habits and pursuits of cultivated life into a tangible and definite form. The Egyptians were ignorant of the construction of the arch, and were consequently compelled to provide for its absence by an accumulation of clumsy pillars and heavy architraves, extremely offensive to the eye of a just taste.

The different kinds of edifices peculiar to the Egyptians are: the subterranean grotto; the pyramid; the obelisk; the labyrinth, that immense collection of halls, of which Herodotus, Pliny, and Strabo, have left us descriptions; the monolithic chamber (constructed of a single stone); and their stupendous temples covered with hieroglyphics, paintings, and sculptures, and preceded by ranges of carved animals, of sphinxes, or of obelisks.

It is in the country of its origin that those colossal wonders, the pyramids, are situated. The largest of the three, which is some leagues distant from Cairo, forms a square, each side of whose base is 660 feet; its external circuit being, therefore, 2640 feet, and is nearly 500 feet in height.

The monuments of ancient Indian architecture which remain to gratify the ardent spirit of inquiry awake at the present period, consist chiefly of excavations from the rock. Of this description we meet with spacious halls and lofty columns, and solemn temples, constructed in such a manner as to excite in the beholder the strongest emotions of admiration and surprise. One of the most remarkable specimens of these Indian excavations is to be found in the little island of Elephanta; perhaps so called from the circumstance of an elephant of black stone, of the size of life, being encountered near the landing-place. The elevated situation of this temple, wrought in a hill of stone, and approached through a quiet and solemn valley, is very striking and impressive. It forms nearly a square of from 150 to 155 feet, and is about fourteen feet and a half in its interior height. The roof is supported by ranges of columns, disposed with sufficient regularity; and upon the walls gigantic figures are sculptured in relief.

The ruins of ancient Persian architecture, although they do not indicate any great superiority as products of art, are yet remarkable when we consider the former greatness and splendour of the empire in which they were erected. The most distinguished are those of Perseopolis, once famous for containing a magnificent palace, the relics of which for a long while comprised forty pillars or columns, and were thence denominated by the inhabitants of the country *cheul minar*, or *tschil minar*, i. e. the palace of forty columns. They are constructed of a species of deep grey marble, very hard, which is susceptible of a beautiful polish, and thence becomes almost black. These noble ruins are now the shelter of birds and beasts of prey.

Our next inquiry into the earlier stages of architecture leads us to take a glance at the productions of the Phœnicians. This primitive people, who possessed the arts of civilization at an extremely remote epoch, had several large cities, famous for their riches, manufactures, and extended commerce. There is reason for supposing that the Phœnician architects were much in the habit of employing timber instead of stone, Mount Lebanon, among other places, furnishing them with an abundant supply of the firmer material; and hence we are led to a consideration of Hebraic architecture, inasmuch as Phœnician artists were doubtless engaged in the building of Solomon's temple, a great portion of which was in all probability constructed of wood.

The Hebrews, or Israelites, acquired a considerable degree of civilization during their residence in Egypt. After their deliverance from captivity, it was suggested to them to construct a place which they might dedicate to the worship of God. Owing to the necessity prescribed by their wandering kind of life, this assumed the shape of a spacious tent, and was denominated the tabernacle. The

whole structure, according to the best authorities, covered a space of 100 biblical cubits, by 50 cubits wide; and the enclosure, five cubits high, was formed of wooden columns with brass bases and silver capitals, having curtains of tapestry suspended between them. These columns were sixty in number; twenty on each side, which lay north and south, and ten on each end, which faced the east and west. The Jews used this moveable temple for a length of time after the conquest of Palestine.

Under the reign of Solomon the grand temple was erected, preparations for which had been made by David, that monarch's father.

The summit of Mount Moriah formed a plain of 36,310 square feet. They began by levelling the top and sides of the mountain, against which they afterwards built a wall of freestone 400 cubits high. The circumference of the mountain at the foot was 3000 cubits. Upon the plain was built the temple, divided, like the tabernacle, into two divisions, by a partition of cedar. Under the second, or the sanctuary, it appears they preserved the treasures of the temple. The exterior walls of the temple were of stone, squared at right angles, and ornamented with the figures of cherubim, palm-leaves, flowers, &c. sculptured probably in the stone, like the Egyptian hieroglyphics. The roof was covered with plates of gold, and in the interior decorated in the richest manner; the Hebrews following the custom at that time of all civilized people in ornamenting their temples, they used a great quantity of gold and precious stones. Besides this temple, Solomon erected many other works, as the walls of Jerusalem, several public granaries, stables, &c.

Of Chinese architecture, the original types and models appear to have been pavilions or tents, and evidences of this derivation are constantly visible in almost all their buildings. The materials chiefly employed by them are various kinds of wood, together with bricks and tiles, burnt or dried in the sun. The prevailing style of Chinese architecture, as has been observed by Mr. Elmes, "must be familiar to every one who has drank from a China tea-cup, or who has seen many of the signs of grocers' shops, Sir William Chambers's pagoda in Kew Gardens, or Mr. Nash's pavilion at Brighton."

But the most gigantic work of Chinese architecture is their celebrated wall, compared with which those of the Picts, the Romans, &c. sink into great inferiority. This stupendous fabric exceeded 2000 miles in length, and comprised 45,000 towers. We must not omit noticing, likewise, the science and mechanical skill displayed in the laying out of their canals, as well as in the construction of their bridges. But, taken altogether, there is little to recommend this light and weak style to the eye of the enlightened connoisseur.

Cadmus, who flourished about 1500 years before the Christian era, is reported to have introduced the arts and sciences into Greece, between 500 and 600 years after the building of the walls of Babylon. He built a city called after the celebrated one in Egypt, Thebes, and it is not at all probable that he was satisfied with borrowing merely the name. The kingdoms of Athens, Argos, Sparta, and Thebes, were successively founded by Cecrops, Cadmus, Inachus, &c.

Art having begun to shed its beams steadily over these distinguished, though at first unimportant, colonies, their radiance was soon diffused throughout the whole country, and a taste gradually sprung up, the correctness and loveliness of which has been subscribed to by all subsequent ages; and which, not seeking to astonish by gigantic and useless productions, selected the choicest materials of preceding styles, and founded thereon that exact proportion, that perfect harmony of parts, which soon rendered the disciples of the Egyptians as completely their masters as ours.

The principal orders in the Grecian architecture are the Doric, the Ionic, and the Corinthian; each of which shall be considered in course. To these may be added the use of the arch.

The first material used by the Greeks in their sacred buildings was timber; next brick, the art of making which they learned from the Egyptians; subsequently stone was employed, as in the temple of Apollo, built by Amphictyon;

and, ultimately, the most enduring as well as the most beautiful of all substances applied to the purpose was abundantly introduced, namely, marble.

Almost coeval with the rise and progress of architecture in Greece is the formation of the Etruscan school. The Etruscans are by some antiquarians said to have been originally a Grecian colony; and to have received, as a matter of course, the arts and sciences from the parent state.

In the most ancient specimens of this school we find abundant use made of the arch, the construction of which was evidently well known to their architects. Their columns differed in shape and proportion from those of any other nation, and Vitruvius has awarded to them the honour of having formed a new order, which, however, is only a variation, and by no means an improvement on the Grecian Doric.

In noticing the best examples of Roman architecture, produced at its most flourishing period, we observe, in addition to the square plans of the Greeks, circular temples crowned with domes. The Corinthian order was evidently the favourite one, and was practised with great skill and success, particularly when not tortured into their own modification of it—the composite.

The most prominent features of the pure Grecian style are invention, elegance, and a severe beauty, at the same time not destitute of richness, which has left to succeeding ages the finest models for imitation. If we turn to the Roman school, which succeeded it, we are struck by the display of splendour, vastness of extent, carelessness of expense, and redundancy of ornament.

The triumphal arches of the Romans constitute a leading feature in their architecture. In the designing of these nothing was overlooked which might tend to perpetuate the fame of the conquerors.

The Saracens, in their buildings in Egypt, appear to have availed themselves, in a very small degree only, of the style of the aboriginal inhabitants. Their style may be justly regarded as the immediate precursor of the Gothic, and is distinguished by the lofty boldness of its vaultings; the slenderness of its columns; the peculiar mixed form of its curves; the variety of its capitals; and the immense profusion of its ornaments. The greatest peculiarity, however, lies in the small clustered pillars, and pointed arches, formed by the segments of two intersecting circles. The genuine style of Gothic architecture is grand, characteristic, and impressive. What it wants in chasteness and simplicity is made up by solemnity, and a grace peculiarly its own. The elements of this style are spires, pinnacles, lofty-pointed windows, and elevation, as opposed to the horizontal line of the Greeks.

Of the progress of the science of architecture in this country, especially the Saxon, the Norman, and modern Gothic, we shall have occasion to speak more at length in an early number.

The Doric Order obtained its name from the Dorians, a nation of ancient Achaia, from whom it unquestionably received those parts and proportions, by means of which it has been distinguished from subsequent orders. The character of the Doric is robust and masculine, and it has hence been termed the Herculean order. From its peculiar character, this order is well calculated for town-halls, gates of cities, and other public buildings destined for purposes of utility rather than ornament. Among the ancients it was almost uniformly executed without a base. However this be, persons of good taste will grant, that a base gives a graceful turn to the column, but is likewise of real use, serving to keep it firm on its plan; and that if columns without bases are now set aside, it is a mark of the wisdom of our architects, rather than an indication of their being governed by prejudice, as some adorers of antiquity would insinuate.

The following are the proportions of the principal parts of this order. The whole height of the entire order is divided into five equal parts, one of which is the height of the pedestal; and the remaining four, which are assigned to the column and entablature, are likewise to be divided into five. One of these belongs to the entablature, and the remaining four being divided into eight equal parts, one of them will be the inferior diameter of the column,

The Ionic Order is said to have been first used in the temple of Diana at Ephesus. This column is more slender and graceful than the Doric. Its ornaments are in a style of composition partaking at once of the plainness of the latter and the richness of the Corinthian. Its general effect is that of simple elegance.

The proportions of the principal parts of the Ionic columns are as follow: the height of the entire order is divided into five equal parts. One of these parts is assigned to the height of the pedestal; and the remaining four are divided into five, for the column and entablature. One of these is appropriated to the entablature, and the remaining four are for the column, including its capital and base. These four being divided into equal parts, one is assigned for the inferior diameter. The cornice is fifty-four minutes in height, and its projection the same. The drip in the under side of the corona is channelled out one minute deep, and two minutes from the front; and before the cyma reversa, one minute.

The shaft of the column is sometimes fluted, and sometimes plain. Twenty, or twenty-four are the number of flutes allotted, not only to this, but to every other order. In general, however, twenty-four are preferable. The plan of the flutes may be rather more than a semicircle, as they will then appear more distinct. The fillets, or intervals between them, must not be broader than one-third of the flutes, nor less than one-fourth; and it should further be observed, that in the capital of rich compositions, over each flute is placed an oval or egg.

The Corinthian Order is evidently derivable from the architecture of Egypt, adapted, refined, and nationalized. Cecrops, the founder of Athens, was an Egyptian; and Dædalus, the earliest Athenian artist, visited the shores of the Nile to study the principles of the fine arts. Added to these facts, it is likewise well known that the Greeks borrowed their laws, manners, and customs, from the Egyptians, and purified them in the alembics of their own brighter genius.

The following are the general proportions of this order: the whole height of the entire order is divided into five equal parts, and one is given for the height of the pedestal. The remaining four are divided into five equal parts; one is assigned for the entablature, and the remaining four are assigned to the height of the column, including its base and capital; which are again divided into ten equal parts, one of which is for the inferior diameter. The base is thirty minutes, and the capital seventy in height. The cornice is sixty minutes in height, and fifty-eight in projection.

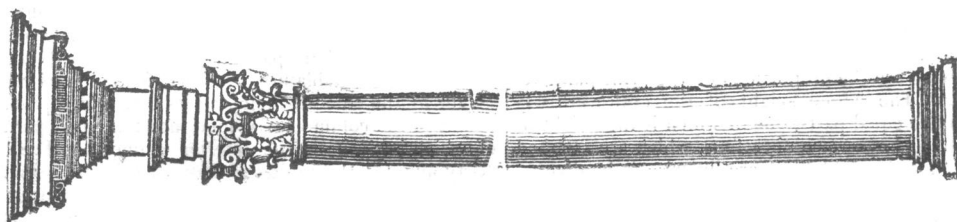
Of the Tuscan Order little historical can be said; neither is there any regular example of it among the remnants of antiquity.

The Composite Order is obviously derived from the Ionic and Corinthian, but it cannot, we think, in any case, be applied with superior effect to the latter. It was first employed by the Romans in the triumphal arches erected by them to exhibit to posterity their dominion over their conquered provinces.

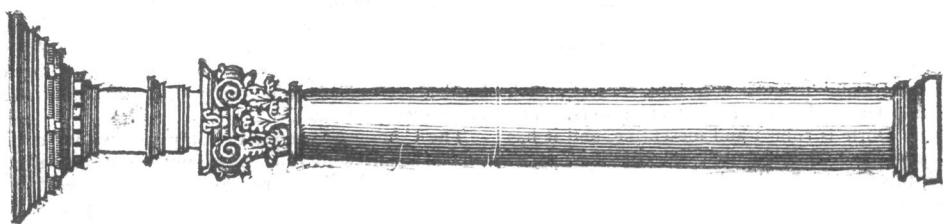
The Composite unquestionably derives its origin from that constant solicitude after novelty which always renders the mind of man restless in enlightened and highly cultivated ages. The desire of variety and novelty, stretched to a point beyond the judicious, engaged the Roman architects to combine with the proportions and enrichments of the Corinthian order the angular volute of the Ionic, and thus to compose a new order.

The following are the general proportions of this order: the height of the entire order is divided into five equal parts, one of which is appropriated for the height of the pedestal, and the remaining four for the column and entablature. These four parts being again divided into five, one is for the entablature, and the remaining four for the height of the column, including its base and capital. The height of the column is divided into ten equal parts, one of which is given to the inferior diameter. The base is thirty minutes, the capital seventy, in height, adorned with acanthus leaves, and volutes, drawn by the same method as those of the Ionic: and the plan of the capital is similar to that of the Corinthian order.

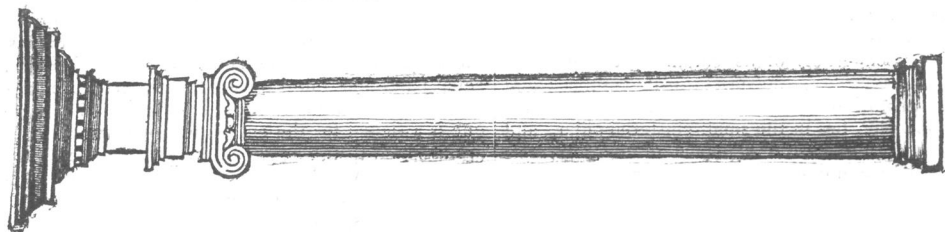
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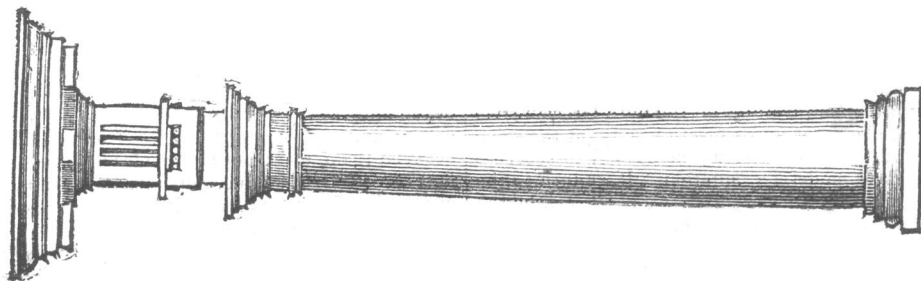
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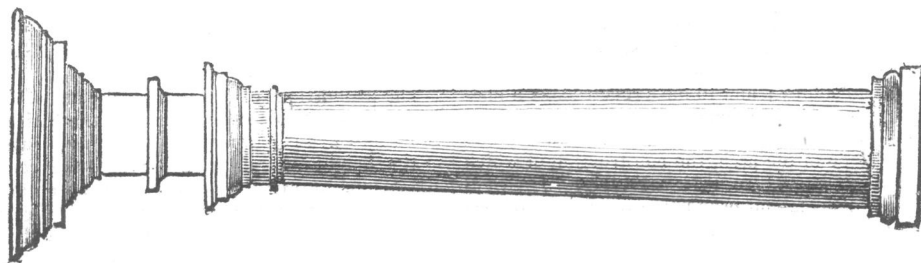
COMPOSITE.



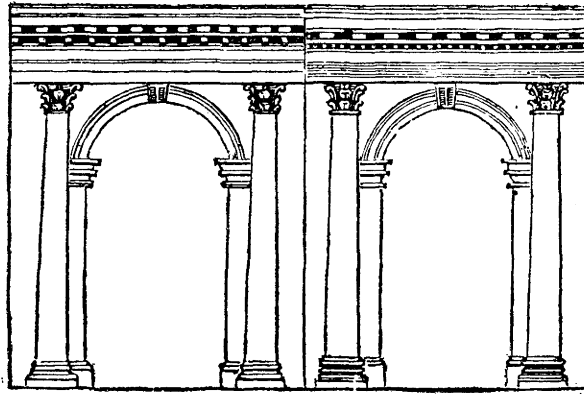
IONIC.



DORIC.

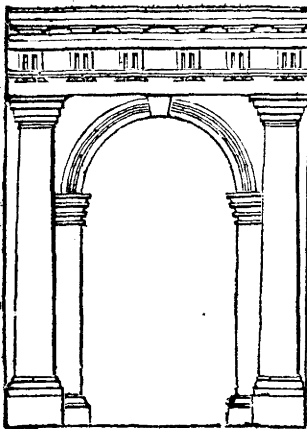


TUSCAN.

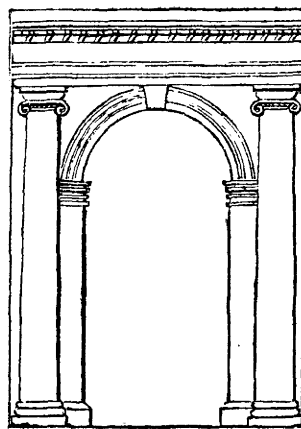


COMPOSITE ARCH.

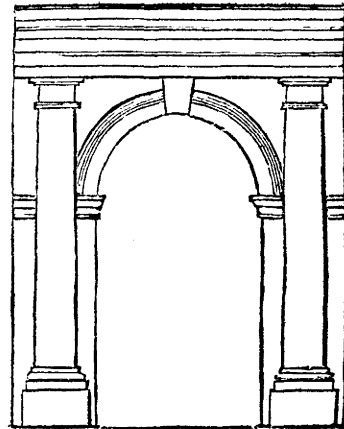
CORINTHIAN ARCH.



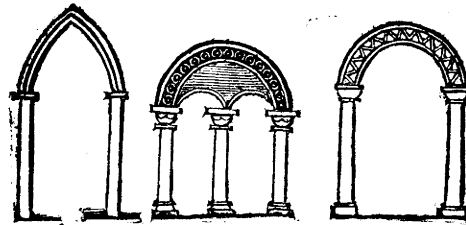
DORIC ARCH.



IONIC ARCH.



TUSCAN ARCH.

COMMON
GOthic ARCH.

SAXON ARCHES.

The foregoing sketch and engravings, for which we are principally indebted to the article on "Architecture" in the London Encyclopædia, (being the best that we could find upon the subject,) will enable those of our kind correspondents who occasionally furnish us with drawings, to state the particular order to which the building belongs, as well as afford the general reader an idea of the description of building, &c. he may meet with from time to time in the Journal.

THE INCONSTANT.

AN IRISH SKETCH.

Gentle reader, have you ever in the course of your wanderings, passed through the pretty little picturesque town of Cullen? It is, without any exception, the neatest and cleanliest collection of residences to be found in our Emerald Isle. It must be admitted, indeed, that we Irish, take us for all in all, are as partial to mud and dunghills as those over modest and unobtrusive animals yclept pigs.

Where will you see a genuine Irish cabin that has not its stagnant pool, in which perchance the rising generation of children and ducks perform daily, nay hourly ablutions? and which the owner might remove with little trouble—"bud thin what id becom ov the crathurs for a place to swim in?" Where will you see a regular "pisant" without his face being innocent of washing, and perfectly free from the imputation of over exactness? unless, indeed, he is about to pay a visit to a *fair* or a *fair one*, for then the knobs of mud are carefully scraped off his brogues, and they present a shining, well-greased appearance, while his visage is shaved and polished with the most scrupulous nicety—as "the boy id like to show dacint afore the colleen." Where will you see—but stop—stop! whither are we wandering? This is no place for dissertations on a subject so trite as Hibernian carelessness of appearance, or in other words, of Irish filth! We were speaking of the town of Cullen. It is a few miles beyond Slane, beautifully situated and all that—(for we decidedly eschew descriptions of places), and presenting to the eye an elegantly arranged set of—we don't know what to term them,